ABSTRACT

A reflective liquid crystal device comprises in sequence a linear polariser, a retarder arrangement comprising two retarders, and a reflector. A first of the retarders provides a retardation of $m\lambda/2$ and a second of the retarders provides a retardation of $n\lambda/4$, where m is an integer and n is an odd integer, and wherein at least one of the first and second retarders comprises a Bistable Twisted Nematic (BTN) liquid crystal. This BTN retarder is switchable between a first state in which the retarder provides a retardation of $m\lambda/2$ or $n\lambda/4$ and a second state in which the retardation is zero.